

INFORMATION DISCLOSURE STATEMENT

22085/2112

10/784,393

Applicant(s): Timperman

Filing Date: February 23, 2004

Group: 1744

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

[illegible]

EXAMINER

DATE CONSIDERED

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****Copies of references not provided at the time of this submission.**

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Attorney Docket No.

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U.S. PATENT DOCUMENTS

Examiner Initial	Patent No.	Date	Name	Class	Subclass	Filing Date (if appropriate)
WAB	5,240,577	August 31, 1993	Jorgenson et al.	204	180.1	June 1, 1992
	5,599,432	February 4, 1997	Manz et al.	204	451	November 8, 1994
	5,942,093	August 24, 1999	Rakestraw et al.	204	450	June 18, 1997
	6,008,893	December 28, 1999	Roos et al.	356	246	March 22, 1999
	6,136,212	October 24, 2000	Mastrangelo et al.	216	49	August 6, 1997
	6,171,067	January 9, 2001	Parce	417	48	October 20, 1999
	6,267,926	July 31, 2001	Reed et al.	422	48	October 8, 1998
	6,271,021	August 7, 2001	Burns et al.	435	287.2	March 18, 1999
	6,274,089	August 14, 2001	Chow et al.	422	101	June 8, 1998
WAB	6,428,666	August 6, 2002	Singh et al.	204	450	February 22, 1999

FOREIGN PATENT DOCUMENTS

Examiner Initial	Document No.	Publication Date	Country	Class	Subclass	Translation	
						YES	NO

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

WAB	A	Chen et al., <u>A Planar Electroosmotic Micropump</u> , 2002, Journal of Microelectromechanical Systems, Vol. 11, No. 6, 672-683
	B	Chien et al., <u>Electroosmotic Pumping in Microchips with Nonhomogeneous Distribution of Electrolytes</u> , 2002, Electrophoresis, Vol. 23, 1862-1869.
	C	Culbertson, et al., <u>Electroosmotically Induced Hydraulic Pumping on Microchips: Differential Ion Transport</u> , 2000, Anal. Chem., Vol. 72, 2285-2291
	D	Figeys et al., <u>Optimization of Solid Phase Microextraction-Capillary Zone Electrophoresis-Mass Spectrometry for High Sensitivity Protein Identification</u> , 1998, Electrophoresis, Vol. 19, 2338-2347
	E	Figeys et al., <u>Proteomics on a Chip: Promising Developments</u> , Electrophoresis, 2001, Vol. 22, pages 208-216
WAB	F	Gao et al., <u>Integrated Microfluidic System Enabling Protein Digestion, Peptide Separation, and Protein Identification</u> , 2001, Anal. Chem., Vol. 73, 2648-2655

WAB

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W	G	Harrison et al., <u>Capillary Electrophoresis and Sample Injection Systems Integrated on a Planar Glass Chip</u> , 1992, Anal. Chem., Vol. 64, 1926-1932
	H	Jacobson et al., <u>Effects of Injection Schemes and Column Geometry on the Performance of Microchip Electrophoresis Devices</u> , 1994, Anal. Chem., Vol. 66, 1107-1113
	I	Khandurina et al., <u>Microfabricated Porous Membrane Structure for Sample Concentration and Electrophoretic Analysis</u> , 1999, Anal. Chem., Vol. 71, 1815-1819
	J	Li et al., <u>Integrated System for High-Throughput Protein Identification Using a Microfabricated Device Coupled to Capillary Electrophoresis/Nanoelectrospray Mass Spectrometry</u> , 2001, Eur. J. Mass. Spec., Vol. 7, 143-155
	K	Li et al., <u>Integration of Microfabricated Devices to Capillary Electrophoresis-Electrospray Mass Spectrometry Using a Low Dead Volume Connection: Application to Rapid Analyses of Proteolytic Digests</u> , 1999, Anal. Chem. Vol. 71, 3036-3045
	L	Licklider et al., <u>Characterization of Reaction Dynamics in a Trypsin-Modified Capillary Microreactor</u> , 1998, Anal. Chem., Vol. 70, 1902-1908
	M	Licklider et al., <u>On-Line Microreactors/Capillary Electrophoresis/Mass Spectrometry for the Analysis of Proteins and Peptides</u> , 1995, Anal. Chem., Vol. 67, 4170-4177
	N	Link et al., <u>Direct Analysis of Protein Complexes Using Mass Spectrometry</u> , 1999, Nature Biotechnology, Vol. 17, 676-682
	O	Liu et al., <u>On-Line Dual Microdialysis with ESI-MS for Direct Analysis of Complex Biological Samples and Microorganism Lysates</u> , 1998, Anal. Chem., Vol. 70, 1797-1801
	P	Liu et al., <u>Optimization of High-Speed DNA Sequencing on Microfabricated Capillary Electrophoresis Channels</u> , 1999, Anal. Chem., Vol. 71, 566-573
	Q	Liu et al., <u>Two-Dimensional Separations: Capillary Electrophoresis Coupled to Channel Gel Electrophoresis</u> , 1996, Anal. Chem., Vol. 68, 3928-3933
	R	McKnight et al., <u>Electroosmotically Induced Hydraulic Pumping with Integrated Electrodes on Microfluidic Devices</u> , 2001, Anal. Chem., Vol. 73, 4045-4049.
	S	Morf et al., <u>Partial Electroosmotic Pumping in Complex Capillary Systems Part I: Principles and General Theoretical Approach</u> , 2001, Elsevier Science B.V., Vol. 72, 266-272
	T	Oleschuk et al., <u>Trapping of Bead-Based Reagents within Microfluidic Systems: On-Chip Solid-Phase Extraction and Electrochromatography</u> , 2000, Anal. Chem., Vol. 72, 585-590
	U	Opiteck et al., <u>Comprehensive Two-Dimensional High-Performance Liquid Chromatography for the Isolation of Overexpressed Proteins and Proteome Mapping</u> , 1998, Analytical Biochemistry, Vol. 258, 349-361
V	V	Opiteck et al., <u>Two-Dimensional Microcolumn HPLC Coupled to a Single-Quadrupole Mass Spectrometer for the Elucidation of Sequence Tags and Peptide Mapping</u> , 1998, Journal of Microcolumn Separations, Vol. 10, 365-375
W	W	Simpson et al., <u>High-Throughput Genetic Analysis using Microfabricated 96-Sample Capillary Array Electrophoresis Microplates</u> , 1998, Proc. Natl. Acad. Sci. USA, Vol. 95, 2256-2261

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<u>WKS</u>	X	Timperman et al., <u>Peptide Electroextraction for Direct Coupling of In-Gel Digests with Capillary LC-MS/MS for Protein Identification and Sequencing</u> , 2000, Anal. Chem., Vol. 72, 4115-4121
	Y	Timperman et al., <u>Wavelength-Resolved Fluorescence Detection in Capillary Electrophoresis</u> , 1995, Anal. Chem., Vol. 67, 139-144
	Z	Vissers et al., <u>Two-Dimensional Capillary Liquid Chromatography Based on Microfractionation</u> , 1999, Journal of Microcolumn Separations, Vol. 11, No. 4, 277-286
	AA	Wall et al., <u>Isoelectric Focusing Nonporous RP HPLC: A Two-Dimensional Liquid-Phase Separation Method for Mapping of Cellular Proteins with Identification Using MALDI-TOF Mass Spectrometry</u> , 2000, Anal. Chem., Vol. 72, 1099-1111
	BB	Wang et al., <u>Integration of Immobilized Trypsin Bead Beds for Protein Digestion within a Microfluidic Chip Incorporating Capillary Electrophoresis Separations and an Electrospray Mass Spectrometry Interface</u> , Rapid Communications in Mass Spectrometry, 2000, Vol. 14, pages 1377-1383
	CC	Xiang et al., <u>An Integrated Microfabricated Device for Dual Microdialysis and On-Line ESI-Ion Trap Mass Spectrometry for Analysis of Complex Biological Samples</u> , 1999, Anal. Chem., Vol. 71, 1485-1490
	DD	Xu et al., <u>A Microfabricated Dialysis Device for Sample Cleanup in Electrospray Ionization Mass Spectrometry</u> , 1998, Anal. Chem., Vol. 70, 3553-3556
<u>WKS</u>	EE	Yang et al., <u>Characterization of Microdialysis Acidification for Capillary Isoelectric Focusing-Microelectrospray Ionization Mass Spectrometry</u> , 1998, Anal. Chem., Vol. 70, 4945-4950
<u>WKS</u>	FF	Zhang et al., <u>De Novo Peptide Sequencing by Two-Dimensional Fragment Correlation Mass Spectrometry</u> , 2000, Anal. Chem., Vol. 72, 2337-2350.

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